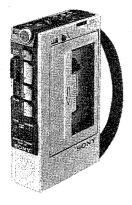
**CASSETTE-CORDER** 

# TCM-141



# OPERATING INSTRUCTIONS page 2

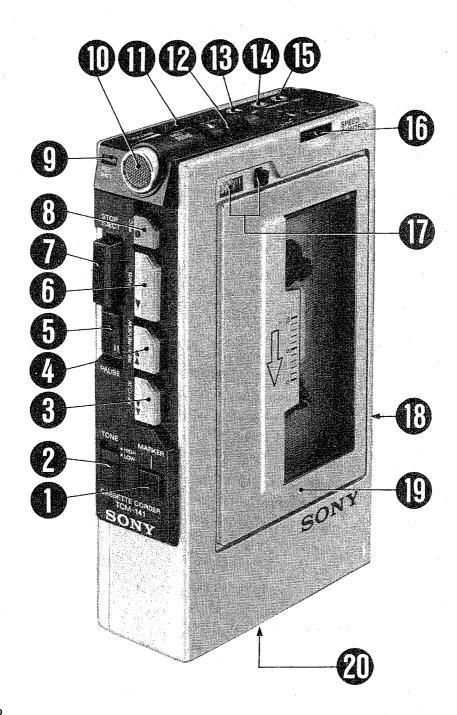
Before operating the set, please read this manual thoroughly. This manual should be retained for future reference.

Keep this page open when reading "LOCATION AND FUNCTION OF CONTROLS".

Tenir cette page ouverte quand on lit le chapitre "EMPLACE-MENT ET FONCTIONS DES COMMANDES".

Beim Lesen des Abschnittes "FUNKTION DER BEDIENUNGSELE-MENTE" halten Sie diese Seite aufschlagen.

Mantenga esta página abierta cuando lee "SITUACION Y FUN-CION DE LOS CONTROLS".



#### **OWNER'S RECORD**

The model number is located at the bottom and the serial number is located in the Battery Compartment.

Record the serial number in the space provided below.

Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. To	CM-141	Serial	No.	
--------------	--------	--------	-----	--

#### WARNING

- To prevent fire or shock hazard, do not expose the set to rain or moisture.
- To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

# **TABLE OF CONTENTS**

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#### **FEATURES**

- The extremely compact size permits easy one hand operation with ultimate recording simplicity—merely insert a cassette and depress a single button.
- A built-in electret condenser microphone whose sensitivity is adjustable to the material to be recorded.
- The MARKER button for marking a desired position on the tape with a signal heard in cue or review mode.
- The tape speed in playback mode can be adjusted.
- Automatic recording control system automatically adjusts and maintains a proper recording level.
- Automatic Shut-off Mechanism activates at end-of-tape in either the record or playback mode.
- Cue and review functions to quickly locate any desired portion of the tape.
- Quick review function facilitates listening to the just recorded program.
- Four different power sources: batteries, house current, rechargeable battery, and 12 V car battery.

#### **PRECAUTIONS**

- Do not open the cabinet. Refer servicing to qualified personnel only.
- Operate the set only on 6 V dc.

For ac operation, use the ac power adaptor recommended for this set. Do not use any other ac power adaptor.

For car battery operation, use the car battery cord recommended for this set. Do not use any other car battery cord.

- The nameplate indicating operating voltage, etc. is located on the rear exterior.
- Disconnect the ac power adaptor from the wall outlet when the set is not to be used for an extended period of time.
- When the set is not to be used for a long period of time or is to be operated extensively on other power sources, remove the batteries to avoid set damage from battery leakage.
- Do not install the set in a location near heat sources such as radiators or airducts, or in a place subject to direct sunlight, excessive dust, moisture, rain, mechanical vibration, or shock.
- Should any liquid or solid object fall into the set, remove the batteries and disconnect the ac power adaptor, and have the set checked by qualified personnel before operating it any further.
- The Record Button cannot be depressed in the following cases. Never depress the button forcibly.
- · No cassette in the Cassette Compartment.
- •The cassette inserted has had the tabs removed.

If you have any question or problem concerning your set that is not covered in this manual, please consult the nearest Sony Service facilities.

## LOCATION AND FUNCTION OF CONTROLS

See photo on page 3.

- **MARKER button:** During recording, press this button at the desired time to record a cue signal marking the required point on the program. In cue or review mode, the recorded signal will be heard making it easy to relocate that portion of the tape.
- **2 TONE control:** Set to HIGH for more treble, and to LOW for less treble.
- FF (fast forward)/CUE button: Depress to rapidly advance the tape. To put the recorder in cue mode, leave the ▼ button locked and press this button down.
- ♠ REW (rewind)/REVIEW button: Depress to rewind the tape. To put the recorder in review mode, leave the ▼ button locked and press this button down.
- **6 II PAUSE button:** Depress to stop the tape for a moment. To restart, press to release the button. To stop the tape for an extended time, use the  $_{\rm EJECT}^{\rm STOP}$  button.
- **6** ▼ FWD (forward) button: Depress to play back the tape.
- **②** STOP button: Press to stop the tape and to release the locked buttons. Press again to open the cassette compartment.
- ⊕ REC (record) button: Depress to record, and the ▼ button will be automatically depressed at the same time.
- REC (record/battery) indicator: While recording, the indicator flickers; in other modes, it lights steadily. During battery operation, it shows the battery condition (page 11).
- 10 Built-in microphone
- **4 VOLUME control:** Turn to adjust the playback volume.
- **MIC SENS (microphone sensitivity) switch:** Change the sensitivity of the built-in microphone with this switch (page 18).
- **® EAR (earphone) jack:** For listening with an earphone or use as an output jack to another tape recorder for duplicating.

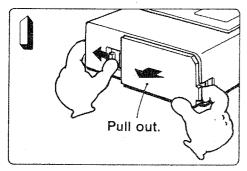
**® REMOTE control jack:** For remote stop/start operation during recording or playback by connecting the Sony FS-10 foot switch (optional), or Sony two-pin plug microphone.

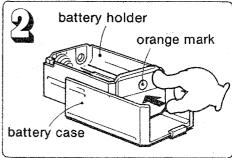
To stop the tape for an extended time, use the STOP button on the recorder.

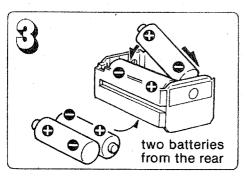
- **6 MIC** (microphone) input jack: for recording with an external microphone, or from a TV, radio or another tape recorder.
- **© SPEED CONTROL:** Turn towards FAST to inclease the playback tape speed, or SLOW to decrease it. The center click is for the normal speed position.
- Tape counter and reset button: Use the counter for indexing the tape contents. Before recording, set the counter to 000 by pushing the reset button. The figures of the counter change as the tape passes. Make a note of the figures and the program being recorded. Later on, the desired program can be rapidly located by using the ₹ or ★ button.
- **® DC IN 6 V (external power input) jack:** For operation from external power sources.
- **© Cassette compartment:** To open the compartment, press the STOP button.
- Battery compartment

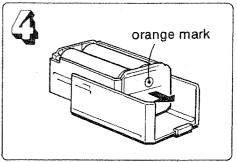
#### **POWER SOURCES**

#### BATTERIES Battery installation









- Detach the Battery Case and remove the Battery Holder from the case.
- ② Insert four batteries, IEC designation R6 (size AA), with correct polarity as illustrated.
- 1 Put the holder into the case while matching the orange marks. Install the Battery Holder and the case into the recorder.
- The set cannot be operated on the internal batteries when either the ac power cord or car battery cord is connected to the set.

**Battery life** 

When recording from the Built-in Microphone, you can expect Sony New Super Batteries SUM-3(NS) or Eveready Heavy Duty Batteries No. 1215 to last for approximately 3.5 hours.

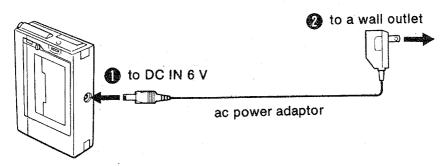
#### To check battery condition

Check the battery condition by observing the REC indicator. If the batteries become weak while the recorder is in operation, the indicator light will glow faintly. When the batteries are exhausted completely, the indicator will not light.

- Recording or playback with weak batteries will cause weak and distorted sound, and it will be necessary to replace all the batteries with fresh new ones.
- For critical recordings, fresh new batteries are recommended.

#### **HOUSE CURRENT**

Use the appropriate ac power adaptor listed on page 12, available in the countries where the set is used. First, connect the adaptor to the recorder DC IN 6 V jack, and then to a wall outlet.

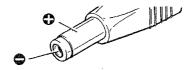


The illustration shows the AC-9W AC Power Adaptor for example.

Where used	AC Power Adaptor	Input voltage of adaptor
U.S.A.	AC-9W (supplied with the TCM-141 available in U.S.A.)	120 V ac, 60 Hz
Canada	AC-9 (supplied with the TCM-141 available in Canada)	
European countries	AC-456C (available in European countries)	110 or 220 V ac adjustable, 50 Hz
The United Kingdom	AC-15A (available in the United kingdom)	240 V ac, 50 Hz
Other countries	AC-4A	110, 120, 220 or 240 V ac adjustable, 50/60 Hz

When the ac power adaptor is connected to the recorder DC IN 6 V jack, the internal batteries (if present) are automatically disconnected.

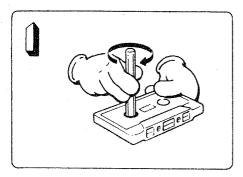
**Note:** Use only an ac power adaptor or car battery cord manufactured by Sony. Polarity of the plugs of other manufacturers may be different.



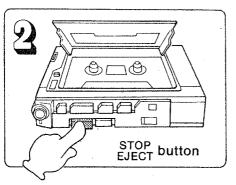
Polarity of the plug of Sony AC Power adaptor and car battery cord

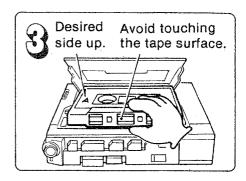
For operation on 12 V car battery or rechargeable battery, refer to page 27.

### **CASSETTE INSERTION**

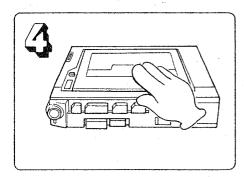


• Before inserting a cassette, take up any slack in the tape by inserting a thick pencil into the hub of the cassette and turning it a few times.





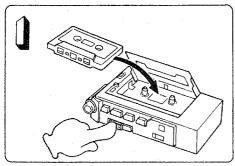
- 2 Press the STOP button to open the cassette compartment lid.
- 3 Place a cassette in the compartment as illustrated.



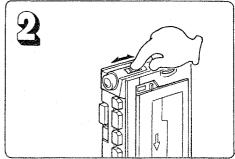
- O Close the lid.
- The tape moves in the direction of the arrow indicated on the cassette compartment while recording or playback. Make sure sufficient tape is on the supply reel before starting to record. If not, depress the  $\clubsuit$  button to rewind the tape and stop the tape with the  $^{STOP}_{EJECT}$  button.

To take out the cassette, press the STOP button.

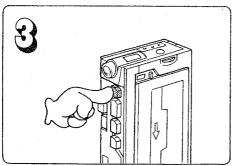
# RECORDING WITH THE BUILT-IN MICROPHONE



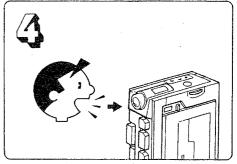
Insert a cassette



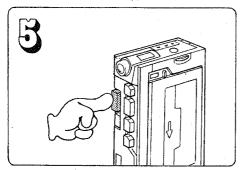
Select the microphone sensitivity with the MIC SENS switch (see page 18).



Depress the button to record.



It's now recording



To stop the tape, press the  $\mathop{\rm STOP}_{\rm EJECT}{\rm button}.$ 

- No recording level adjustment is necessary with the automatic recording control system.
- The REC indicator flickers during recording.
- The sound to be recorded can be heard through the earphone. The sound level through the earphone is fixed.
- At the end of the tape, the tape motion stops and the locked buttons are released automatically.
- If the recording is not completed by the end of one side, take out the cassette, turn the cassette over and repeat the recording procedures.

#### To listen to the program just recorded

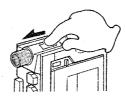
Depress the ★ button to rewind the tape, stop the tape with the STOP button, and depress the ▼ button.

Quick review function (page 23) facilitates listening of the program just recorded.

**Note:** Make sure that nothing is connected to the MIC jack. Otherwise, the recording with the built-in microphone cannot be made.

#### **BUILT-IN MICROPHONE SENSITIVITY**

Select the microphone sensitivity with the MIC SENS switch. When the MIC SENS switch is set to HIGH:



Use this position to pick up sound away from the built-in microphone.

#### When the MIC SENS switch is set to LOW:



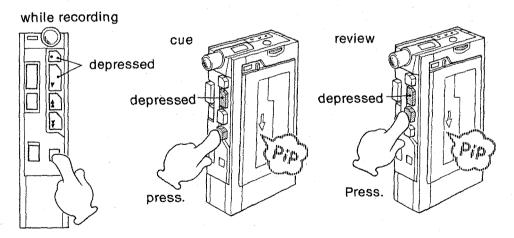
Use this position to pick up relatively large sound near the microphone, while eliminating other environmental noise.

#### HOW TO USE THE MARKER BUTTON

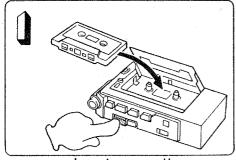
Use this button to facilitate replay of a certain portion of the tape. During recording, depress the MARKER button at the point on the program that you want to locate quickly afterward. When the button is depressed, a low-frequency cue signal is recorded, and it can be heard as a signal in cue or review mode, heard over the chirping sound of the rapidly transported tape.

#### Notes:

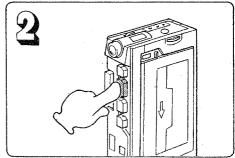
- Depress the MARKER button firmly for about five seconds.
- The recorded cue signal is not heard in playback, ordinary fast forward, or rewind mode (with the ▼ button up), or when the VOLUME control is turned fully counterclockwise.
- The MARKER button itself functions only in the record mode.



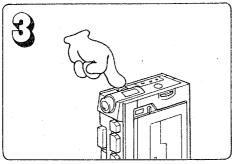
#### **PLAYBACK**



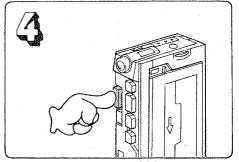
Insert a cassette



Depress the ♥ button to play back.



Adjust the volume.



To stop, press the STOP button.

- During playback the REC indicator lights.
- For listening with an earphone, plug it into the EAR jack. The speaker is automatically disconnected.
- At the end of the tape, the tape motion stops and the locked button is released automatically.

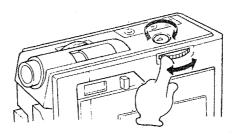
#### HOW TO USE THE SPEED CONTROL

The playback speed can be adjusted with the SPEED CONTROL knob (blue). Turn the knob towards FAST to increase the playback speed up to as much as 30% faster than normal speed.

This helps to shorten the listening time of contents of the recording.

Turn the knob towards SLOW to decrease the playback speed up to as much as 10% slower than normal speed. This is convenient when transcribing the contents of the recording. At the center click position of the knob, the original speed of recording can be obtained.

• The SPEED CONTROL cannot be operated when recording.



#### **Automatic Shut-off Mechanism**

In record or playback mode, tape motion stops at the end of the tape and the locked button will return to its original position automatically.

● In fast forward or rewind mode, you must depress the STOP button at the end of the tape to stop the mechanism.

# FUNCTIONS TO MAKE RECORDING/PLAY-BACK EASY

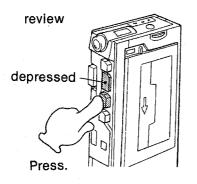
#### **Pause**

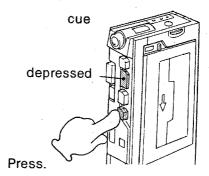
Press the **!!** button to stop the tape for a moment in any operating mode. To restart, press the button again to release it.

The pause function is convenient when you want to eliminate unwanted material or when you would like to write something down.

#### **Cue and Review Function**

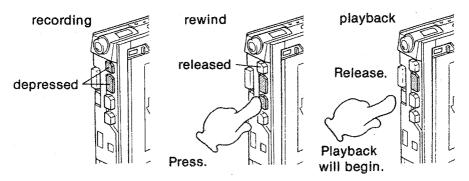
During playback, you may skip-over unnecessary portions of the tape by pressing the button (cue function), or repeat a certain portion of the tape by pressing the button (review function). When the or button is released, the recorder will automatically return to the playback mode.





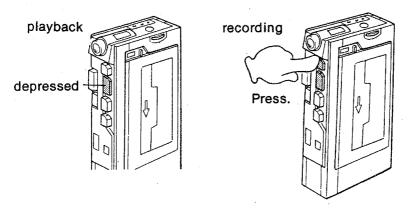
#### **Quick Review Function**

Simply depress the \$\frac{1}{\infty}\$ button while recording. By releasing the \$\frac{1}{\infty}\$ button, the recorder will go into the playback mode for review of the recorded material.



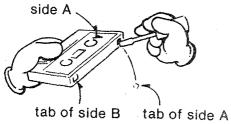
#### Instant Edit Function

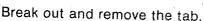
During playback, simply depress the REC button, and the recorder will immediately change to the recording mode. This function is convenient for correcting a previously recorded portion.

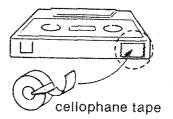


# TO PREVENT ACCIDENTAL ERASURE

When a recording is made, previous recordings are automatically erased. To prevent accidental erasure, break out the small tabs at the rear of the cassette. When a cassette with the tabs broken out is loaded, the REC button cannot be depressed. To record on a cassette after the tabs have been removed, simply cover each slot with a small piece of cellophane or vinyl tape.







# **ERASING WITHOUT RECORDING**

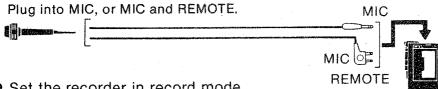
Insert the supplied SP-100 shorting plug in the MIC jack and set the TCM-141 in recording mode. Erasing will begin. After erasing, be sure to disconnect the SP-100.

### RECORDING FROM VARIOUS SOUND SOURCES

Various sound sources can be connected to the proper recorder jacks on the top by using an appropriate optional connecting cord. Before proceeding with the recording, check the following points and illustrations.

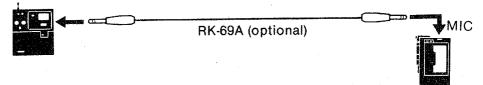
- The sound to be recorded can be heard through the earphone.
- If your radio, TV, etc., is not a Sony product, refer to the instruction manual of that set.
- The sound to be recorded can be heard through the earphone.

#### Recording with an external microphone:



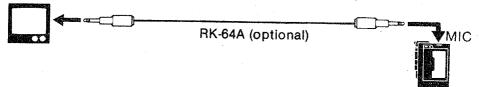
- Set the recorder in record mode.
- The built-in microphone is disconnected automatically.
- A two-pin plug microphone provides a remote tape stop/start facility.

#### Recording from a radio or a TV equipped with a recording jack:



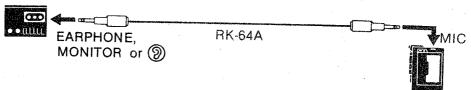
- Tune in the desired radio or TV program. Its volume or tone control setting has no effect on the recording.
- Set the recorder in record mode.

# Recording from a TV equipped with an earphone jack:



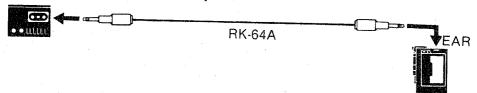
- Tune in the desired TV program and adjust it to a normal listening level.
- Set the recorder in record mode.

#### Duplicating from another tape recorder:



- Set the other tape recorder in playback mode and adjust it to a normal listening level.
- Set the TCM-141 in record mode.

# Duplicating onto another tape recorder:



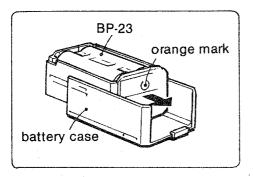
- Set the TCM-141 in playback mode and adjust it to a normal listening level.
- Set the other tape recorder in record mode.

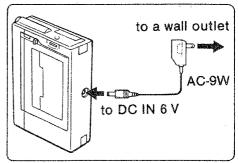
#### OTHER POWER SOURCES

#### RECHARGEABLE BATTERY PACK

Install the Sony BP-23 Rechargeable Battery Pack (optional) into the battery compartment instead of the battery case.

Before using, charge the battery pack as follows:



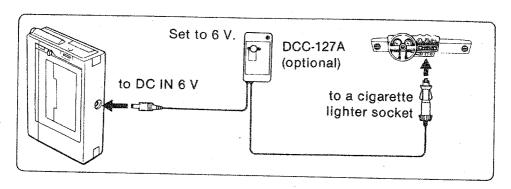


- Connect the AC Power Adaptor as illustrated. Charging will begin.
- Charging time is about 4.5 hours.
- When charging is completed, remove the ac power adaptor to avoid overcharging.
- The recorder can be operated while charging, although more charging time will be needed.
- The fully charged BP-23 allows approx. 3.5 hours of continuous recording with the Built-in microphone.
- While the voltage of the rechargeable battery pack can be checked in the same way as for regular batteries, this is not a reliable index of the remaining operating life, since a nickel-cadmium battery such as the BP-23 will furnish a nearly constant voltage up to the end of its capacity, and then drop quickly to a low value. Keeping a record of the time in actual use is the most reliable measure of remaining battery life when using nickel-cadmium batteries.

#### 12 V CAR BATTERY

Use the Sony DCC-127A Car Battery Cord (optional), and connect the recorder DC IN 6 V jack to the cigarette lighter socket of a car.

For further details, refer to the instruction manual of the DCC-127A.



- Before connecting, be sure to set the output voltage of the car battery cord to 6 V.
- When the car battery cord is connected to the DC IN 6 V jack, the internal batteries (if present) are automatically disconnected.

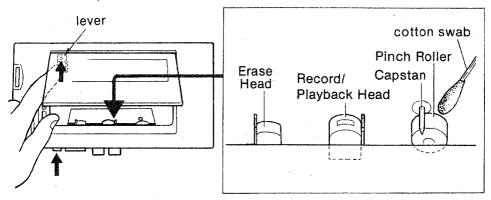
#### **MAINTENANCE**

#### Cleaning the heads

Keeping the tape heads in a clean condition is essential to the proper operation of the recorder. Accumulations of dust and tape oxides on the heads will result in sound drop-outs, a loss of high frequencies and excessive tape wear.

To clean the heads:

- Press the STOP button to open the cassette compartment lid. Remove the cassette, if present.
- While pressing the lever as shown in the direction of the arrow, depress the ● REC button to move the heads out for easier access.
- Moisten a cotton swab or a soft cloth with a denatured alcohol, and gently wipe the heads, capstan and pinch roller over which the tape travels.



- Avoid catching the cotton between the pinch roller and capstan.
- Press the STOP button to release the locked button.
- Do not insert a cassette if the heads are protruding; first press the STOP button.
- Do not insert a cassette before the alcohol has dried completely.

#### Demagnetizing the head

Either prolonged use, or an accidental contact with a piece of magnetized steel (screwdriver, scissors, etc.) will magnetize the record/playback head causing an increase in tape noise.

In such an event, demagnetize the head using a commercially available head demagnetizer.

- Be careful not to demagnetize the Erase Head.
- When demagnetizing, remove the batteries and disconnect the ac power adaptor.

#### Cleaning the cabinet

Clean the cabinet with a soft cloth slightly moistened with water or a mild detergent solution. Do not use solvents such as alcohol, benzine, or thinner as they may mar the finish of the cabinet.

#### **SPECIFICATIONS**

Recording system

Fast winding time

2-track 1-channel monaural

Approx. 2 min. 10 sec. with Sony Cassette

C-60

Tape speed

Frequency response

4.8 cm/sec (1  $^{7}$ /<sub>8</sub> ips)  $^{+30}_{-10}$ % adjustable

90-9,000 Hz

Speaker

Power output

Power output Input Approx. 5 cm (2 inches) dia. 400 mW (at 10% harmonic distortion)

Microphone input jack (minijack) sensitivity 0.2 mV (-72 dB)

for low impedance microphone

Output

Earphone jack (minijack)

for 8-ohm earphone or load impedance

10 kilohms or higher

Other jack

Remote control jack

Power requirements

6 V dc, 4 batteries IEC designation R6 (size AA), or optional Sony BP-23 Rechargeable Battery Pack

120 V ac, 60 Hz with AC-9W ac power adaptor supplied with the model available in U.S.A. or with AC-9 ac power adaptor supplied with the model available in Canada.

110 or 220 V ac, 50 Hz with optional AC-456C ac power adaptor available in European countries

240 V ac, 50 Hz with optional AC-15A ac power adaptor available in the United Kingdom

110, 120, 220 or 240 V ac, 50/60 Hz with optional AC-4A ac power adaptor available in other countries

12 V car battery with optional Sony DCC-127A Car Battery Cord Battery life

Approx. 3.5 hours of continuous recording with the Built-in microphone with Sony New

Super Batteries SUM-3(NS) or Eveready

Heavy Duty Batteries No. 1215

Dimensions

Approx.  $40 \times 155.5 \times 93$  mm (w/h/d)

 $(1^{5}/_{8} \times 6^{1}/_{8} \times 3^{11}/_{16} \text{ inches})$ 

Weight

not incl. projecting parts and controls Approx. 520 g (1 lb 2<sup>3</sup>/<sub>e</sub> oz)

incl. batteries

Accessories supplied

Demonstration tape cassette

Earphone

Shorting Plug SP-100

Carrying case

AC Power Adaptor (for USA and Canadian

model)

Sony New Super Batteries SUM-3(NS) (for

general export model)

While the information given is true at the time of printing, small production changes in the course of our company's policy of improvement through research, and design might not necessarily be indicated in the specifications. We would ask you to check with your appointed Sony dealer if clarification on any point is required.

#### Note

Appliance conforms with EEC Directive 76/889 regarding interference suppression.

#### **OPTIONAL ACCESSORIES**

AC Power Adaptor AC-456C (in European countries)

AC-15A (in the United Kingdom)

AC-4A (in other countries)

Battery Pack BP-23

Car Battery Cord DCC-127A

Electret Condenser Microphone ECM-16

Dynamic Microphone F-V3T, F-V4T, F-250S

(S type microphone provides remote start/stop capability.)

Connecting Cord RK-64A (miniplug to miniplug with attenuator)

RK-69A (miniplug to miniplug)

Remote Control RM-15

Foot Switch FS-10

Cassette Eraser BE-9H (not available in USA and Canada)

Continued trouble-free operation of any tape recorder is dependent on the quality of the cassettes used in conjunction with it. The use of Sony Cassettes is recommended for high quality recording and trouble-free operation.

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information about the optional accessories available in your country.

# TROUBLESHOOTING GUIDE

Should any problem occur with the set, make the following simple tests to determine whether or not servicing is required. If the problem persists after you have made these tests, consult the nearest Sony dealer for further information.

#### Cassette cannot be inserted.

- Cassette is being inserted improperly. See page 14.
- The ▼ button is depressed.

# The REC button can not be depressed.

- No cassette in the cassette compartment.
- The cassette inserted has had the tabs removed. See page 24.

#### The ▼ button cannot be locked.

● The tape is completely wound towards the arrow direction on the cassette compartment lid.

#### Tape does not move.

- The ac power adaptor is not connected (on ac operation).
- Battery operation is attempted while the ac power adaptor or car battery cord is connected to the recorder but not to the wall outlet or the cigarette lighter socket.
- Incorrect polarity of batteries.
- Weak batteries.
- The PAUSE button is locked.
- An external microphone is connected with its remote switch set to OFF.

#### No sound from the speaker.

- The earphone is plugged in.
- The VOLUME control is turned down completely.

#### Weak or distorted sound.

Weak batteries.

#### Sound drop-outs, loss of high frequencies, or excessive noise.

- Dirty heads. See page 29.
- Magnetized record/playback head. See page 30.

#### Tape speed is too slow.

Weak batteries.

#### Tape speed is excessively fast or slow while playing back.

• The SPEED CONTROL is towards FAST or SLOW.

#### Recording cannot be made or is unsatisfactory.

- Improper procedure or connection. See page 25.
- Weak batteries.
- Dirty record/playback head. See page 29.

#### Unsatisfactory erasing.

Dirty erase head. See page 29.